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Response to Advisory Action

In the Drawings

There are no amendments to the drawings.

Remarks

The Examiner has rejected claims 1 – 9 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 4,341,803 to Koshida et al. (“the ’803 patent”). The Examiner has further rejected claims 1 – 23 under 35 U.S.C. §103(a) as being unpatentable over U.S. Published Patent Application No. 2004/0166228 A1 to Loh et al. (“the ’228 application”) in view of U.S. Patent No. 6,312,745 to Durance et al. (“the ’745 patent”) and further in view of U.S. Patent No. 2,283,302 to Webb (“the ’302 patent”). These rejections are respectfully traversed.

The Examiner has stated that “Once the examiner provides a rationale tending to show the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. In re Marosi, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). Such a showing has not been demonstrated here. The arguments of counsel cannot take the place of evidence in the record. In re Shulze, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 965 [sic]). Applicant is in [sic] invited to submit any evidence that demonstrates how the claimed product may be different from that taught by Koshida in the form of an affidavit or declaration.” (Advisory Action, p. 2).

Applicant submits herewith, the Affidavit of the Mr. Michael Wefers ("the Affidavit") outlining the differences between the final food product produced by the method taught in the '803 patent and that taught in the present application.

The Examiner has stated that "absent a showing by clear and convincing evidence, it is not seen how the product claimed defines over the '803 patent. The Affidavit clearly states a number of differences between the final dried food product produced by the method taught in the '803 patent and the final dried food product produced by the presently claimed invention. For example, the Affidavit states,

The color is more intense and darker. Due to the oxygen present in the atmosphere in pre-drying step, an oxidation on the product surface takes place, leading to a more attractive, intense and darker color of the final food product;

The taste is stronger and more intense. At entry of the food product to the vacuum in step two of the present method, a sudden puffing of the collapsed cell structures occurs due to the pressure differences (product interior approx. = 1000 mbar / ambient pressure approx. = 20 mbar), which leads to a cell disruption. This causes the taste components within the cells to be set free and thus reach the taste nerves of the tongue in a quicker and more intense manner;

The nutrient uptake for the consumer is faster. Due to the physical methods described above, a faster uptake of nutrients is possible because of the cell disruption;

The structure is crisp and crunchy. Since during the initial freeze-drying step taught in the '803 patent, the structure of the product is generally retained, a Styrofoam-like character results, which corresponds to the freeze-dried products. A largely homogenous cell structure is seen when cutting up products manufactured according to this process, while the products manufactured by the presently claimed method show a disrupted cell structure leading to the crispy and crunchy effect; and

Rehydration is non-uniform and generally slower. Through the partially destroyed cell structures that result from the presently claimed method, the rehydration time is generally slower and more uneven than the products manufactured

according to the method taught in the '803 patent, where the cell structures have generally not be damaged.

(Affidavit, pp. 2-3, 8a – 8e). Therefore, as seen by the Affidavit, not only is the presently claimed method (Claim 9) different from that taught in the '803 patent, but the final food product is very different than the final food product produced by the method taught in the '803 patent. This is due in large part to the fact that the pre-drying step causes the cell structures to rupture and shrink, whereas the '803 patent is concerned with essentially maintaining or avoiding rupture of the cell structures. (See, col. 4, lines 42-58, "The freeze-drying is performed to reduce the moisture content in the starting fruit chips so as to maintain the original volume and the inherent taste of the fruit chips.") However, in the present invention, the step of freeze-drying is specifically rejected so that cell rupture can occur and shrinkage occurs. (See, para. 6 – 8; Affidavit at 6).

Accordingly, Applicant respectfully submits that, because the dried food product produced by according to Claim 1 is different from the dried food product produced by the method taught and disclosed in the '803 patent, Claim 1 cannot be anticipated or obvious in view of the '803 patent. Applicant further respectfully submits that, because the '803 patent fails to teach, disclose or suggest the steps of thawing and predrying with at least one of a solution kept at a temperature high enough to thaw the frozen products and having an osmotic pressure higher than water in which the frozen food product is dipped, and hot conditioned air; and heat treating by microwave treatment in a vacuum said food product so that a cellular break-up and puffing up of said food prod-

uct occurs for obtaining hydratable food product being finally dried and hygienic, as required by Claim 9, the '803 patent cannot anticipate or render Claim 9 obvious.

Applicant further respectfully submits that the dried food product of according to Claim 1 is very different than that disclosed in the '228 application because Claim 1 requires "in a fifth treatment step, is subjected to a heat treatment in a vacuum by means of microwave treatment so that a cellular break-up and puffing up of said food occurs for obtaining well hydratable food being finally dried and having an instant character." (emphasis added) (See, Affidavit at 6 & 8b). Claim 8 further requires among other limitations "heat treating by microwave treatment in a vacuum said food product so that a cellular break-up and puffing up of said food product occurs for obtaining hydratable food product being finally dried and hygienic." (emphasis added) (See, Affidavit at 8e). Both of these steps are inapposite to the process taught in the '228 application. The '228 application teaches that "[a]pplication of the aqueous solution of the polyhydric alcohol prior to drying appears to allow sufficient migration of polyhydric alcohol into the cellular structure during drying, thereby effectively plasticizing the cellular structure of the fruits and vegetables. The resulting plasticized product is rendered non-brittle as indicated by a drastic reduction of lines and/or broken pieces." (para. 25).

It is also well settled that if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). In this case Applicant respectfully submits that while

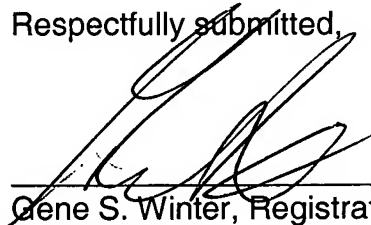
the '228 application teaches a process for avoiding cellular break-up, the Examiner has stated that the '745 patent teaches "microwave treatment so that a cellular break-up and puffing up of the food occurs." (Official Action, p. 5). Applicant therefore respectfully submits that it cannot be obvious to combine the '228 application, which is directed to a method of avoiding cellular break-up with the '745 patent, which the Examiner submits teaches a method of cellular break-up as this works in contravention to and would defeat the purpose of the '228 application. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) (See, para. 6 – 8; Affidavit at 6).

Accordingly, Applicant respectfully submits that because all the claims of the present application require microwave treatment so that a cellular break-up and puffing up of said food occurs and the '228 application is directed toward a method of avoiding such break-up, it cannot be obvious to modify the '228 application in view of the present claims. In addition, Applicant respectfully submits that because the '228 application is directed toward a method of avoiding cellular break-up, it cannot be obvious to combine the '228 application with the '745 patent as the Examiner has submitted.

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It is respectfully submitted that claims 1 – 10 and 13 - 23, all of the claims remaining in the application, are in order for allowance and early notice to that effect is respectfully requested.

Respectfully submitted,



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